**DELKRON CYLINDER HEAD INSTALLATION INSTRUCTIONS**
**PART NUMBERS 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059**

**NOTICE: If you are not experienced in engine building or do not feel confident in performing this upgrade; *STOP* and consult an experience engine builder or shop!**
**These heads will accommodate up to .640 lift cams, but it is the engine builder's responsibility to check all related clearances.**

1. **Valve to valve clearances at TDC openings.**
2. **Valve to piston clearances.**

**WARNING! Incorrect installation of this kit could result in bodily harm, death, and or property damage.**

## CAUTION!

**Use of adjustable pushrods is strongly recommended when installing these performance cylinder heads.**

## CAUTION!

**Many issues can result from reusing o-rings some of which could be, low oil pressure and oil leakage. Always use new o-rings and make sure they are in the appropriate locations.**

1. Place the head gasket over the dowels.
2. Note that the letter F or R is cast into the top of the cylinder head to ensure proper installation. Carefully set the cylinder head over the two dowels in the cylinder head mating surface. Be careful not to drag the gasket surface across the dowels.

## CAUTION!

**Thoroughly clean and lubricate the threads of the cylinder head bolts prior to installation. Dirt, grime, and dry interfaces can cause friction, resulting in false torque values.**

3. Lightly coat the threads and bottom flange of the head bolts with clean light engine oil.

4. Start the head bolts onto the cylinder studs, the 2 short bolts on the left side of the engine and the longer bolts on the right side.
5. Tighten the head bolts as per the appropriate service manual.

**CAUTION!**

**Improperly tightened cylinder head bolts may result in gasket leaks, stud failure and distortion of the cylinder head and/or cylinder.**

6. Install a new rocker housing gasket on the cylinder head mating surface.

**NOTICE: If using OEM/ stock rocker boxes they must be modified to install the breather channel using the enclosed template as described in the Notice and Caution sheet.**

**CAUTION!**

**Because of high lift valve spring packs, clearance to rocker housings should be checked. There should be .025 minimum clearance to spring retainers.**

**CAUTION!**

**Be careful! Rocker housing to cylinder head gaskets can be installed upside down and still have proper bolt hole alignment. An upside down gasket will result in an open breather channel which will cause a major oil leak when the engine is started and possibly engine and/or property damage.**

7. Verify that the rocker housing gasket is correctly installed by noting that the breather passage is concealed. Check hole alignment with cylinder head. With the indent facing forward, place the rocker housing into position aligning the holes in the housing with the holes in the gasket.
8. Apply a small amount of medium strength threadlocker 242/243 (blue) to the threads of the six rocker housing bolts. Start the rocker housing bolts, two long bolts on the left side of the engine, four intermediate bolts in the interior. Install rocker arm support plate into rocker housing and start the four mounting bolts (with flat washers). Two short bolts on the left side of engine, two long bolts on the right. Alternately tighten the **rocker housing bolts** to 10-14 ft/lbs as shown in the appropriate service manual.
9. Install new o-ring in the groove around the breather baffle hole in rocker housing. A thin film of engine oil is recommended during installation.
10. Install pushrods and pushrod tubes as per service manual. Make sure o-rings are in place and seated.
11. When installing the rocker arms for the cylinder being serviced, both lifters for that cylinder should be on the heel (lowest position) of the cam.
12. Following the pattern shown in the appropriate service manual alternately tighten each of the four rocker arm support mounting bolts until snug. Then following the same numerical sequence; torque the bolts to 15-18 ft/lbs.
13. Verify that pushrods spin freely.

**CAUTION!**

**Rotating the engine with the valve train loaded can result in bent pushrods or valve damage.**

14. If using adjustable pushrods; adjust pushrods as per the manufacturer's instructions.
15. Install the two breather cover and baffle bolts. Alternately tighten bolts to 90-120 in/lbs.
16. Install a new rocker cover gasket and place rocker cover in position, making sure that all the holes are in alignment.
17. Apply a small amount of medium strength threadlocker 242/243 (blue) to the threads of the six rocker cover bolts. Start the cover bolts, the three short bolts on the left side of the engine, three long bolts on the right. Torque bolts to 9-12 ft/lbs. using the pattern shown in the appropriate service manual.
18. Finish final assembly as per service manual.
19. **HAVE FUN!**